

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/435,257B

DATE: 05-11-2001

TIME: 14:11:41

Input File: A:\385A US.ST25.txt

Output File: C:\CRF3\06012001\I435257B.raw

RECEIVED

NOV 13 2001

TECH CENTER 1600/2900

1 <110> APPLICANT: President and Fellows of Harvard College
 2 <121> TITLE: FUSION OF TWO DIFFERENT PROTEIN DOMAINS
 3 <131> FILE REFERENCE: ARIAS-1A-01
 4 <140> CURRENT APPLICATION NUMBER: US 09/435,257B
 C--> 10 <141> CURRENT FILING DATE: 2001-05-14
 11 <160> NUMBER OF SEQ ID NOS: 34
 12 <170> SOFTWARE: PatentIn version 3.1
 13 <210> SEQ ID NO: 1
 14 <211> LENGTH: 14
 15 <212> TYPE: PRT
 16 <213> ORGANISM: Artificial Sequence
 17 <220> FEATURE:
 18 <221> NAME/KEY: BINDING
 19 <222> LOCATION: (1)..(14)
 20 <223> OTHER INFORMATION: membrane binding domain
 21 <400> SEQUENCE: 1
 22 Met Gly Ser Ser Lys Ser Lys Pro Lys Asp Pro Ser Gly Arg
 30 1 5 10
 31 <210> SEQ ID NO: 2
 32 <211> LENGTH: 4
 33 <212> TYPE: PRT
 34 <213> ORGANISM: Artificial Sequence
 35 <220> FEATURE:
 36 <221> NAME/KEY: BINDING
 37 <222> LOCATION: (1)..(4)
 38 <223> OTHER INFORMATION: organelle targeting domain
 39 <400> SEQUENCE: 2
 40 Lys Asp Glu Leu
 40 1
 41 <210> SEQ ID NO: 3
 42 <211> LENGTH: 4
 43 <212> TYPE: PRT
 44 <213> ORGANISM: Artificial Sequence
 45 <220> FEATURE:
 46 <221> NAME/KEY: BINDING
 47 <222> LOCATION: (1)..(4)
 48 <223> OTHER INFORMATION: organelle targeting domain
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 50 His Asp Glu Leu
 50 1
 51 <210> SEQ ID NO: 4
 52 <211> LENGTH: 42
 53 <212> TYPE: RNA
 54 <213> ORGANISM: Artificial Sequence
 55 <220> FEATURE:
 56 <221> NAME/KEY: misc_structure
 57 <222> LOCATION: (1)..(42)

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/435,257B

DATE: 6/1/01

TIME: 14:12:42

Input File: A:\385A US.ST25.txt

Output File: C:\CRF3\06012001\I435257B.raw

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72 <223> OTHER INFORMATION: hCNA cloning oligo.12
73 <400> SEQUENCE: 4
74 cgggcccccc ctgagcttta ctgagctgacag ggggttgaac ga
42
75 <210> SEQ ID NO: 5
76 <211> LENGTH: 41
77 <212> TYPE: DNA
78 <213> ORGANISM: Artificial Sequence
79 <214> FEATURE:
80 <215> NAME/KEY: misc_structure
81 <216> LOCATION: (1)..(41)
82 <217> OTHER INFORMATION: hCNA cloning oligo.1240
83 <400> SEQUENCE: 5
84 atataaattg ctgagctgcat actggcttcc aaatttcatt g
41
85 <210> SEQ ID NO: 6
86 <211> LENGTH: 44
87 <212> TYPE: DNA
88 <213> ORGANISM: Artificial Sequence
89 <214> FEATURE:
90 <215> NAME/KEY: misc_structure
91 <216> LOCATION: (1)..(43)
92 <217> OTHER INFORMATION: hCNA cloning oligo.350
93 <400> SEQUENCE: 6
94 atataaattg ctgagcttta ctgggtacct tccatttggc gggg
44
95 <210> SEQ ID NO: 7
96 <211> LENGTH: 58
97 <212> TYPE: DNA
98 <213> ORGANISM: Artificial Sequence
99 <214> FEATURE:
100 <215> NAME/KEY: misc_structure
101 <216> LOCATION: (1)..(58)
102 <217> OTHER INFORMATION: hCNA cloning oligo.370
103 <400> SEQUENCE: 7
104 ccagtappgt ctgatatctgg gccacgata taagtgcagc ttgaggacat ttaccage
58
105 <210> SEQ ID NO: 8
106 <211> LENGTH: 9
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial Sequence
109 <214> FEATURE:
110 <215> NAME/KEY: misc_structure
111 <216> LOCATION: (1)..(9)
112 <217> OTHER INFORMATION: overlapping XbaI and BglII sites
113 <400> SEQUENCE: 8
114 tctagatct
9
115 <210> SEQ ID NO: 9
116 <211> LENGTH: 63
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
119 <214> FEATURE:
120 <215> NAME/KEY: misc_structure

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/435,257B

DATE: 01/01/01

TIME: 14:12:42

Input Set : A:\385A US.ST25.txt

Output Set: C:\CRF3\06012001\I435257B.raw

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146 <220> LOCATION: (1)..(41)
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149 atgaaatgag cctgaggggaa atgaggcaag ttatatcttg g
150 atg
151 <210> SEQ ID NO: 1
152 <211> LENGTH: 41
153 <212> TYPE: DNA
154 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <221> NAME/KEY: misc_structure
157 <222> LOCATION: (1)..(41)
158 <223> OTHER INFORMATION: hCNB cloning oligo
159 <400> SEQUENCE: 10
160 atataaatcg ctgaggggaa atgaggcaag ttatatcttg g
161
162 <210> SEQ ID NO: 11
163 <211> LENGTH: 38
164 <212> TYPE: DNA
165 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <221> NAME/KEY: misc_structure
168 <222> LOCATION: (1)..(38)
169 <223> OTHER INFORMATION: hCNB cloning oligo
170 <400> SEQUENCE: 11
171 atataaatcg ctgaggaatg agggagagta tctctcttg
172
173 <210> SEQ ID NO: 12
174 <211> LENGTH: 65
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
177 <220> FEATURE:
178 <221> NAME/KEY: misc_structure
179 <222> LOCATION: (1)..(65)
180 <223> OTHER INFORMATION: hCNB/FLAG cloning oligo
181 <400> SEQUENCE: 12
182 ttaattctaga tctgggacct cacttgctcat cgtcatcctt atagtcgacc acatctacca
183
184 <210> SEQ ID NO: 13
185 <211> LENGTH: 116
186 <212> TYPE: DNA
187 <213> ORGANISM: Artificial Sequence
188 <220> FEATURE:
189 <221> NAME/KEY: misc_structure
190 <222> LOCATION: (1)..(116)
191 <223> OTHER INFORMATION: hDNA template primers
192 <400> SEQUENCE: 13
193 gattttatat aggcctctta catctagacc caatgaca atcaggaaca gaaccccaaa
194
195 <210> SEQ ID NO: 14
196 <211> LENGTH: 116

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RAW SEQUENCE LISTING

PATENT APPLICATION NO: US/09/435,257B

DATE: 01/11/01

TIME: 14:11:11

Input File: A:\385A US.ST25.txt

Output File: C:\CRF3\06012001\I435257B.raw

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232 <212> TYPE: DNA
233 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <221> NAME/KEY: misc_structure
236 <222> LOCATION: (1)..(38)
237 <223> OTHER INFORMATION: CNA-CNE linker oligo
238 <400> SEQUENCE: 14
239 gaatgcgaaa totagatctg ggcccgctcat ctttatagtc gacaccagaa gaataacc 58
240 <210> SEQ ID NO: 18
241 <211> LENGTH: 38
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <221> NAME/KEY: misc_structure
246 <222> LOCATION: (1)..(38)
247 <223> OTHER INFORMATION: CNA-CNE linker oligo
248 <400> SEQUENCE: 15
249 gaatgcgaaa totagatctg ggcccgctcat ctttatagtc gacagaacca gaaccaga 59
250 <210> SEQ ID NO: 16
251 <211> LENGTH: 72
252 <212> TYPE: DNA
253 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <221> NAME/KEY: misc_signal
256 <222> LOCATION: (1)..(72)
257 <223> OTHER INFORMATION: CNA 370 linker oligo
258 <400> SEQUENCE: 16
259 ggggtttctg atttatctag ttctggttat ggt tgggt ctgtttcttg ttctggttat 60
260 ggtttctggttt 72
261 <210> SEQ ID NO: 17
262 <211> LENGTH: 24
263 <212> TYPE: PRT
264 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <221> NAME/KEY: PEPTIDE
267 <222> LOCATION: (1)..(24)
268 <223> OTHER INFORMATION: CNA 370 linker
269 <400> SEQUENCE: 17
270 Gly Gly Ser Gly Ser Gly Gly Ser Gly Ser Gly Ser Gly Ser Gly Ser 60
271 1 5 10 15
272 Gly Ser Gly Ser Gly Ser Gly Ser
273 20
274 <210> SEQ ID NO: 18
275 <211> LENGTH: 31
276 <212> TYPE: DNA
277 <213> ORGANISM: Artificial Sequence
278 <220> FEATURE:
279 <221> NAME/KEY: misc_structure
280 <222> LOCATION: (1)..(31)

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RAW SEQUENCE LISTING

PATENT APPLICATION NO: US/09/435,257B

DATE: 6/1/01

TIME: 14:11:40

Input File: A:\385A US.ST25.txt

Input Seq: C:\CRF3\06012001\I435257B.raw

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294 <223> OTHER INFORMATION: CNA primer..
297 <400> SEQUENCE: 15
298 gttagacacaa ccaagaccaa a
21
301 <210> SEQ ID NO: 15
302 <211> LENGTH: 21
303 <212> TYPE: CNA
304 <213> ORGANISM: Artificial Sequence
306 <220> FEATURE:
307 <221> NAME/KEY: misc_feature
308 <222> LOCATION: (1)..(22)
309 <223> OTHER INFORMATION: CNA primer..
312 <400> SEQUENCE: 19
313 gtacacacaa gaacacagaa c
21
316 <210> SEQ ID NO: 20
317 <211> LENGTH: 6
318 <212> TYPE: CNA
319 <213> ORGANISM: Artificial Sequence
321 <220> FEATURE:
322 <221> NAME/KEY: misc_feature
323 <222> LOCATION: (1)..(6)
324 <223> OTHER INFORMATION: Sall Site
327 <400> SEQUENCE: 20
328 gttagac
6
331 <210> SEQ ID NO: 21
332 <211> LENGTH: 4
333 <212> TYPE: PRT
334 <213> ORGANISM: Artificial Sequence
336 <214> FEATURE:
337 <215> NAME/KEY: PEPTIDE
338 <216> LOCATION: (1)..(5)
339 <217> OTHER INFORMATION: GS linker repeats
342 <400> SEQUENCE: 21
343 Gly Gly Ser Gly Ser
345 1 5
347 <210> SEQ ID NO: 22
348 <211> LENGTH: 4
349 <212> TYPE: PRT
350 <213> ORGANISM: Artificial Sequence
352 <220> FEATURE:
353 <221> OTHER INFORMATION: mature GAP peptide fragment
355 <214> FEATURE:
356 <215> NAME/KEY: PEPTIDE
357 <216> LOCATION: (1)..(4)
358 <217> OTHER INFORMATION: mature GAP fragment
361 <400> SEQUENCE: 22
362 Val Asp Thr Ser
364 1
366 <210> SEQ ID NO: 16
367 <211> LENGTH: 6

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/435,257B

DATE: 6/1/01

TIME: 11:11:41

Input File: A:\385A US.ST25.txt

Output File: C:\CRF3\06012001\I435257B.raw

Error Message: Current Filing Date differs, Expected Current Filing Date

Error Message: 40 "N" : "Yes" used, for CE, Item 1

Error Message: 40 "N" : "Yes" used, for CE, Item 4